## IN THE CLAIMS

1. (previously presented) An optical device for treating an incident X-ray beam, said device comprising:

a monochromator; and

an optical element for conditioning the incident X-ray beam, the optical element including an X-ray reflective surface having a multilayer structure to produce a two-dimensional optical effect in order to adapt a beam directed towards the monochromator;

wherein said reflective surface consists of a single surface, said reflective surface being shaped according to two curvatures corresponding to two different directions.

- 2. (previously presented) The optical device according to claim 1, wherein said single reflective surface is of a multilayer type with a lateral gradient.
- 3. (previously presented) The optical device according to claim 1, wherein the single reflective surface comprises a depth gradient.
- 4. (previously presented) The optical device according to claim 1, wherein said reflective surface is shaped in each of the said two different directions in order to produce two respective one-dimensional effects.
- 5. (previously presented) The optical device according to claim 1, wherein said reflective surface has a geometry which is substantially circular in a first direction and substantially parabolic in a second direction.
- 6. (previously presented) The optical device according to claim 5, wherein said first direction is a saggital direction of

the optical element and the second direction is a meridional direction of the optical element.

- 7. (previously presented) The optical device according to claim 1, wherein said reflective surface has a substantially toroidal geometry.
- 8. (previously presented) The optical device according to claim 1, wherein said reflective surface has a substantially paraboloidal geometry.
- 9. (previously presented) The optical device according to claim 1, wherein said reflective surface has a substantially ellipsoidal geometry.
- 10. (Previously presented) The optical device according to claim 1, wherein said reflective surface is able to reflect rays of lines  $Cu-K\alpha$  or  $Mo-K\alpha$ .
- 11. (Previously presented) The optical device according to claim 1, wherein the monochromator comprises a germanium crystal, and the optical element comprises a W/Si multilayer coating with a lateral gradient.
- 12. (currently amended) The optical device according to claim 1, wherein the optical element of the optical device has a length of around 2 cm, said optical device being usable with a source of X-rays having a size of around a few tens of 40 microns by a few tens of 40 microns in order to produce a sample spot of around 300\*300 microns.
- 13. (previously presented) The optical device according to claim 4, wherein a first one of the one-dimensional effects is a collimation.

- 14. (previously presented) The optical device according to claim 13, wherein a second one of the one-dimensional effects is a collimation or a focusing.
- 15. (previously presented) The optical device according to claim 1, wherein said reflective surface has a geometry defined by an open or closed curve different from a circle in a first one of the directions and substantially parabolic in a second one of the directions.
- 16. (previously presented) The optical device according to claim 1, wherein said reflective surface has a geometry substantially elliptical in a first one of the directions and substantially parabolic in a second one of the directions.
- 17. (previously presented) The optical device according to claim 1, wherein said reflecting surface has a geometry substantially parabolic in the two different directions.